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| 09/649,954      | 08/29/2000  | Norbert George Vogl  | YOR920000534US1     | 9872             |

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EXAMINER

TIV, BACKHEAN

ART UNIT PAPER NUMBER

2151

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/649,954

Applicant(s)

VOGL ET AL.

Examiner

Backhean Tiv

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☒ Claim(s) 1,2,7,18,22,23,26,and 27 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Detailed Action***

Claims 1-27 are pending in this application.

***Claim Objections***

Claims 1,2,7,18,22,23,26,27 are objected to because of the following informalities:

As per claim 1, the applicant's states "respective portion", line 20, it is unclear what is meant by "respective portion". Does the applicant mean respective portion of the memory or respective portion of the file or respective portion of the database?

Claims 23,26, and 27 are objected to under the same deficiency as claim 1.

As per claim 2, the applicant's states "one or more portions", it is unclear what is meant by "one or more portions". Does the applicant mean one or more portions of the memory or network buffer or file?

Claim 7 and 18 is objected to under the same deficiency as claim 2.

Claim 7 is also objected to because, the limitation "the burst size" and "the burst rate" in lines 4 and 5. Claim 5, which claim 7 is dependant on, recites a network dispatcher, where the transmission criteria further include any one or more of the following: a duration, a burst rate, and a burst size. The transmission criteria does not include all three criteria so if the duration was to be chosen and the criteria, claim 7 would not make sense.

Claim 22 recites, "an status indicator", this is grammatically incorrect. It should instead read "a status indicator".

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-11, 23, 26, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,240,460 issued to Mitsutake et al.(Mitsutake) in view of US Patent 5,890,134 issued to Fox in further view of US Patent 5,907,556 issued to Hisanaga et al.(Hisanaga).

As per claim 1, Mitsutake teaches a computer network dispatcher comprising:

one or more memories(col.10,lines 23-28);

one or more inputs for accessing one or more files from a database stored in the memory(col.1,lines 23-29,col.7,lines 16-21;it is inherent that there is a database stored in memory because data is being transmitted from one terminal to another);

one or more outputs to one or more respective network buffers(col.3,lines 30-34);

one of the transmission criteria being a quantity to transmit criteria defining a quantity of one or more of the portions of the respective file to

1 transmit(col.10,line 37) and another of the transmission criteria being one  
2 or more release times being the time at which the respective portion is to  
3 be written to the network buffer(col.10,lines 30-41); a feedback using a  
4 quantity completion measure to estimate a completion time of the writing  
5 of the respective portion to the respective network buffer(col.20,lines 31-  
6 49);

7 a dispatching process that determines an available space on one or more  
8 of the network buffers and the dispatching process taking a minimum  
9 value of the available space and the quantity of the respective portion, the  
10 dispatching process writing the minimum value of the respective portion to  
11 one or more of the network buffers(col.29,lines 1-18; by taking the  
12 average time of each page to be printed, the examiner interprets that this  
13 is the minimum value of available space on the network buffer and by  
14 scheduling the print-out order of the job on the printer as writing it to the  
15 network buffer);

16 However does not teach one or more file lists, stored in one or more of the  
17 memories, identifying one or more of the files in the database that are to be transmitted  
18 over one or more networks connected to the respective network buffer; one or more  
19 schedulers that schedules one or more portions of one or more of the files to be written  
20 to the respective network buffers by defining transmission criteria about each of the files  
21 in the file list; the scheduler rescheduling one or more of the portions if one or more of  
22 the portions can not be scheduled to meet the respective transmission criteria; a current

1 system time, the dispatching process determining if the system time is greater than or  
2 equal to one of the release times.

3 Fox teaches one or more file lists, stored in one or more of the memories,  
4 identifying one or more of the files in the database that are to be transmitted over one or  
5 more networks connected to the respective network buffer(col.3,lines 34-46); one or  
6 more schedulers that schedules one or more portions of one or more of the files to be  
7 written to the respective network buffers by defining transmission criteria about each of  
8 the files in the file list(col.3,lines 34-46); the scheduler rescheduling one or more of the  
9 portions if one or more of the portions can not be scheduled to meet the respective  
10 transmission criteria(col.3,lines 34-46).

11 Therefore, it would have been obvious to one having ordinary skill in the art at  
12 the time of the invention to modify the system of transmitting data with certain criteria as  
13 taught by Mitsutake to add a scheduler to transmit data as taught by Fox in order to  
14 improve data transmission by taking into account available resources(col.1,lines 4-9)

15 Mitsutake in view of Fox however does not teach a current system time, the  
16 dispatching process determining if the system time is greater than or equal to one of the  
17 release times.

18 Hisanaga teaches a current system time, the dispatching process determining if  
19 the system time is greater than or equal to one of the release times(col.5, line 65-  
20 col.6,line 3; examiner interprets the time for transmission as the system time and the  
21 time period as the release time).

1       Therefore, it would have been obvious to one having ordinary skill in the art at  
2       the time of the invention to modify the system of transmitting data with a scheduler for  
3       certain criteria as taught by Mitsutake in view of Fox to take into account system time as  
4       taught by Hisanaga in order to obtain high efficiency of use of transmission  
5       bandwidth(col.4,lines 41-44).

6       As per claim 2, a dispatcher, as in claim 1, where the rescheduling changes the  
7       transmission criteria of one or more of the portions(Fox, col.3,lines 33-46).

8       As per claim 3, a dispatcher, as in claim 2, where the changes to the  
9       transmission criteria include any one or more of the following: changing one or more  
10      release times, changing one or more of the quantities, removing one or more of the  
11      transmission criteria, and adding one or more transmission criteria(Fox, col.3,lines 33-  
12      46).

13      As per claim 4, a network dispatcher, as in claim 1, where the available space is  
14      influenced by any one or more of the following: a network speed, a network bandwidth,  
15      a network congestion, a time of network availability, a duration of network availability,  
16      and a network use pricing(Mitsutake, col.1,lines 31-35).

17      As per claim 5, a network dispatcher, as in claim 1, where the transmission  
18      criteria further include any one or more of the following: a duration, a burst rate, and a  
19      burst size(Mitsutake, col.20,lines 40-49).

20      As per claim 6, a network dispatcher, as in claim 5, where duration establishes  
21      an end time beyond which no more of the portion is written to the network  
22      buffer(Mitsutake, col.20,lines 40-49).

1           As per claim 7, a network dispatcher, as in claim 5, where the portion is  
2   partitioned into quantities of a size equal to the burst size and each quantity is written to  
3   the respective network buffer at a time interval equal to the burst rate(Hisanaga,  
4   col.9,lines 13-24).

5           As per claim 8, a network dispatcher, as in claim 1, where the file list further  
6   identifies one or more destination addresses of one or more recipients(Hisanaga,  
7   col.11,lines 17-20).

8           As per claim 9, a network dispatcher, as in claim 1, where the file list further  
9   identifies one or more transmission types defining how the portion is sent over the  
10   network(Mitsutake, col.4,lines 12-45).

11           As per claim 10, a network dispatcher, as in claim 9, where the transmission  
12   types include one or more of the following: unicast, multicast, broadcast, internet  
13   protocol (IP), IPX, asynchronous transfer mode (ATM), UDP, and TCP/IP(Mitsutake,  
14   col.4,lines 12-45).

15           As per claim 11, a network dispatcher, as in claim 1, where the quantity  
16   completion measure is any one or more of the following: an accumulated amount of one  
17   or more of the portions transmitted, and an amount of the portion transmitted(Mitsutake,  
18   col.29, lines 1-18).

19           Claim 23 is of the same scope as claim 1, therefore is rejected based on the  
20   same rationale. Claim 23 recites a method while claim 1 is a system (see claim 1  
21   rejection).



1           Claims 26 and 27 are of the same scope as Claim 1, therefore is rejected based  
2   on the same rationale. Claim 27 recites a computer program produce while claim 1 is a  
3   system (see claim 1 rejection).

4  
5           Claims 12-17,25 are rejected under 35 U.S.C. 103(a) as being unpatentable over  
6   US Patent 6,240,460 issued to Mitsutake et al.(Mitsutake) in view of US Patent  
7   5,890,134 issued to Fox in further view of US Patent 5,907,556 issued to Hisanaga et  
8   al.(Hisanaga) in further view of US Patent 5,819,094 issued to Sato et al.(Sato).

9  
10          Mitsutake in view of Fox in further view of Hisanaga teaches all the limitations of  
11   claim 1, however does not teach as per claim 12, a network dispatcher, as in claim 1,  
12   where a time stamp is stored with the quantity completion measure in a history log.

13          Sato teaches where a time stamp is stored with the quantity completion measure  
14   in a history log(col. 5,lines 55-67).

15          Therefore, it would have been obvious to one having ordinary skill in the art at  
16   the time of the invention to modify the system of transmitting data with a scheduler for  
17   certain criteria as taught by Mitsutake in view of Fox in further view of Hisanaga to add  
18   where a time stamp is stored with the quantity completion measure in a history log as  
19   taught by Sato in order to log data collection and analysis(col.2,lines 15-16).

20          As per claim 13, a network dispatcher, as in claim 12, where the quantity  
21   completion measure is one or more statistics of the history log(Mitsutake, col.20,lines  
22   31-49 and Sato, col.2,lines 36-42).

1       As per claim 14, a network dispatcher, as in claim 13 when the statistics include  
2 any one or more of the following: an average amount written and a change in amount  
3 written(Sato, col.2,lines 43-46).

4       As per claim 15, a network dispatcher, as in claim 12, where one or more parts of  
5 the history log is recorded(Sato, col.2,lines 48-51).

6       As per claim 16, a network dispatcher, as in claim 1, where one or more errors  
7 are stored in a history log(Sato, col.9, lines 10-16).

8       As per claim 17, a network dispatcher, as in claim 16, where the errors include  
9 any one or more of the following: a disk error, a network error, a destination not found  
10 error, and a destination not responding error(Hisanaga, col.6,lines 20-25;examiner  
11 interprets the transmission error as a destination not found error).

12       As per claim 25, a method, as in claim 23, further comprising the step of time  
13 stamping one or more of the quantity completion measures(Sato, col.5,lines 55-61).

14  
15       Claims 18,19 are rejected under 35 U.S.C. 103(a) as being unpatentable over  
16 US Patent 6,240,460 issued to Mitsutake et al.(Mitsutake) in view of US Patent  
17 5,890,134 issued to Fox in further view of US Patent 5,907,556 issued to Hisanaga et  
18 al.(Hisanaga) in further view of US Patent 6,502,062 issued to Acharya et al.(Acharya).

19  
20       Mitsutake in view of Fox in further view of Hisanaga teaches all the limitations of  
21 claim 1, however does not teach as per claim 18, a network dispatcher, as in claim 1,

1 further comprising a network use criteria table used by the scheduler to schedule the  
2 portions.

3 Acharya teaches a network use criteria table used by the scheduler to schedule  
4 the portions(Fig.6 and Fig.7).

5 Therefore, it would have been obvious to one having ordinary skill in the art at  
6 the time of the invention to modify the system of transmitting data with a scheduler for  
7 certain criteria as taught by Mitsutake in view of Fox in further view of Hisanaga to add a  
8 network use criteria table used by the scheduler to schedule the portions as taught by  
9 Acharya in order to improve scheduling methods that provide satisfactory  
10 performance(col.2,lines 57-60).

11 As per claim 19, a network dispatcher, as in claim 1, further comprising a network  
12 use criteria table used by the dispatching process to take the minimum value of the  
13 available space, the quantity of the respective portion, and a remaining amount of  
14 defined network use(Acharya, Fig.6 and Fig.7).

15  
16 Claims 20, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over  
17 US Patent 6,240,460 issued to Mitsutake et al.(Mitsutake) in view of US Patent  
18 5,890,134 issued to Fox in further view of US Patent 5,907,556 issued to Hisanaga et  
19 al.(Hisanaga) in further view of US Patent 6,502,062 issued to Acharya et al.(Acharya)  
20 in further view of US Patent 5,819,094 issued to Sato et al.(Sato).

21

1 Mitsutake in view of Fox in further view of Hisanaga in further view of Acharya  
2 teaches all the limitation of claim 18 and an amount of network use field(Acharya, Fig.6  
3 and Fig.7), however does not teach as per claim 20, a network dispatcher, as in claim  
4 18, where the network use criteria table has a plurality of records, each record  
5 containing a time stamp field.

6 Sato teaches the network use criteria table has a plurality of records, each record  
7 containing a time stamp field(Fig.2,element 21).

8 Therefore, it would have been obvious to one having ordinary skill in the art at  
9 the time of the invention to modify the system of transmitting data with a scheduler for  
10 certain criteria as taught by Mitsutake in view of Fox in further view of Hisanaga in  
11 further view of Acharya to add the network use criteria table has a plurality of records,  
12 each record containing a time stamp field as taught by Sato in order to log data  
13 collection and analysis(col.2,lines 15-16).

14 As per claim 21, a network dispatcher, as in claim 20, where an aggregate of the  
15 amount of network use is recorded in a history log(Archarya, col.9,lines 40-59).

16  
17 Claims 22, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over  
18 US Patent 6,240,460 issued to Mitsutake et al.(Mitsutake) in view of US Patent  
19 5,890,134 issued to Fox in further view of US Patent 5,907,556 issued to Hisanaga et  
20 al.(Hisanaga) in further view of US Patent 5,581,369 issued to Righter et al.(Righter).

21

1 Mitsutake in view of Fox in further view of Hisanaga teaches all the limitations of  
2 claim 1, however does not teach as per claim 22, a network dispatcher, as in claim 1,  
3 further comprising a status indicator for sending one or more acknowledgments to one  
4 or more schedulers indicating one or more of the portions have been entirely  
5 transmitted over the network.

6 Righter teaches a status indicator for sending one or more acknowledgments to  
7 one or more schedulers indicating one or more of the portions have been entirely  
8 transmitted over the network(col.5,lines21-33).

9 Therefore, it would have been obvious to one having ordinary skill in the art at  
10 the time of the invention to modify the system of transmitting data with a scheduler for  
11 certain criteria as taught by Mitsutake in view of Fox in further view of Hisanaga to add  
12 the idea of having a status indicator to inform a scheduler that data transmission is  
13 complete as taught by Righter in order to know when a data transmission is  
14 complete(col.5,lines 21-33).

15 Claim 24 is of the same scope as claim 22, therefore is rejected based on the  
16 same rationale (see claim 22 rejection).

17  
18 **Conclusion**

19 Any inquiry concerning this communication or earlier communications from the  
20 examiner should be directed to Backhean Tiv whose telephone number is (703) 305-  
21 8879. The examiner can normally be reached on 9 A.M.-12 P.M. and 1 -6 P.M.  
22 Monday-Friday.

Art Unit: 2151

1 If attempts to reach the examiner by telephone are unsuccessful, the examiner's  
2 supervisor, Glenton B Burgess can be reached on (703) 305-4792. The fax phone  
3 number for the organization where this application or proceeding is assigned is 703-  
4 872-9306.

5 Information regarding the status of an application may be obtained from the  
6 Patent Application Information Retrieval (PAIR) system. Status information for  
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10 you have questions on access to the Private PAIR system, contact the Electronic  
11 Business Center (EBC) at 866-217-9197 (toll-free).

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16 Backhean Tiv  
17 Art Unit 2151  
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